Shubham Tapadiya (he/him/his)

Portfolio: https://ShubhamTapadiya.com

PROFESSIONAL SUMMARY

Results driven and motivated Software Engineer with demonstrated experience in full stack development. Productive in team and individual projects, showing expertise in design, development, and delivery of high-quality client solutions. Seeking to leverage proven leadership, achievements, and skills to ensure project success.

TECHNICAL SKILLS

Programming Languages	: Java, Python, C, C++, Bash Scripting, JSON
Databases	: MongoDB (NoSQL), Firebase (NoSQL), Oracle (SQL), Postgres (SQL)
Web Technologies	: HTML, CSS, JavaScript, React.js, Angular.js, Node.js, REST API
Performance Testing Tools	: LoadRunner, JMeter, Wireshark, Flexible IO Tester (FIO), Easy Mock (Unit Testing)
DevOps and Cloud Computing	: AWS, Git, Linux, Docker, Kubernetes, Temporal, JIRA
Frameworks and Tools	: Spring Boot, Maven, GitLab (CI/CD), Elastic Search
Development Tools and others : Maven, Spring, Putty, Winscp, Tabby, Keycloak	

PROFESSIONAL EXPERIENCE

Software Engineer, E2Open | Austin, USA

- Successfully migrated a monolithic system to a distributed architecture with zero downtime using containerization, Kubernetes, and Helm Charts, enhancing scalability and fault tolerance
- Implemented ActiveMQ for synchronized queuing with Apache Camel on Java-based codebase
- Automated builds using Bamboo and facilitated deployment by patching the code into Docker containers and Performed multiple deployments using Jenkins
- Developed Bash scripts to facilitate automated testing with JMeter and retrieve results through SQL queries
- Worked on Catenax protocol for streamlining data integration across the value chain, utilizing EDC connector, Temporal for durable execution, and Keycloak for identity and access management
- Engaged in support activities using Elasticsearch for real-time indexing, analysis, and search, coupled with Kibana for visualization, while also employing Zabbix for comprehensive server monitoring
- Engineered a project utilizing Maven and the Spring framework to effectively implement gRPC technology, significantly enhancing performance by 70 percent through the utilization of bidirectional streaming for internal services
- Executed numerous deployments efficiently utilizing Jenkins for continuous integration
- Proficient in various protocols such as AS2 and message formats like X12 EDI, enabling seamless communication and data exchange within supply chain systems
- Utilized other services like: Bitbucket , Jfrog Artifactory, VMware, Grafana, Prometheus

Software Development Engineer, Amazon Web Services (AWS) | Boston, USA

- Delivered OpenZFS SAZ File Server to customers in a cloud environment on the FSx team
- Worked on the development of the highly available file system offering
 - o Enabled EC2 instances to configure DRBD resources for data replication between available nodes
 - Planned, designed, and executed the development of a robust and scalable API for OpenZFS file systems using Java, leveraging modern software development practices and principles
 - Conducted Proof-of-concept (PoC) and performance testing for data synchronization between resource devices
- Improved operational posture by developing tools and procedures that limit access to host instances, resulting in an 80% reduction in the risk of unintended changes in data or system configuration
- Worked on scoping down the Service Linked Role (SLR) policies for increased security across all supported AWS regions
- Designed and implemented customer console experience for OpenZFS SAZ filesystem, and developed an internal operational website to track Volumes and Snapshots, increasing efficiency for operators and customers by 90%
- Optimized SQL queries to improve database efficiency and reduce data load time by 40%
- Performed deep packet inspection using Wireshark to assist in testing and troubleshooting of EC2 instance server
- Delegated the task of delivering performance metrics in AWS CloudWatch and scaling storage from backups to two interns, effectively mentoring and guiding them through the process
- Operated on highly visible customer-facing issues such as kernel deadlock due to stuck Transaction Groups (TXGs) in quiesce state and handle file system creates due to Amazon Elastic Block Store (EBS) insufficient capacity
- Implemented GitLab for version control and project management, facilitating streamlined coordination and organization of
 project tasks and code changes among team members

Aug 2021 – June 2023

July 2023 – Present

- Implemented quality assurance measures by utilizing EasyMock and JMockit testing frameworks, and integrated Maven to streamline the project's build process and ensure seamless execution of tests
- Utilized other AWS Services: EC2, EBS, CloudWatch, CloudFormation, CodeDeploy, SWF, S3, Secrets Manager, Lambda and VPC

Philanthropic Software Engineer, AJ Investment / Mumbai, India

- Achieved a 75% increase in profitability by developing and expanding an investment control system with Python and storing customer data in an Oracle database, enabling data-driven decision-making
- Containerized the application using Kubernetes, resulting in improved scalability and fault tolerance and contributing to observed cost reductions
- Involved in team project for the development of pre-existing software to analyze current market investments
- Implemented Spring Boot and Spring Data JPA to efficiently persist and retrieve data in a PostgreSQL database

EDUCATION

Master of Science - Computer Science | Binghamton University, State University of New York

- Relevant Coursework: Operating Systems, Programming Languages, Database Systems
- Certifications: Databases and SQL with Python

Bachelor of Engineering - Computer Science / University of Mumbai

ACADAMIC PROJECTS

Road Symbols Recognition [OpenCV Library, Python]

- Programed an application in Python to identify road symbols for maintaining safe driving conditions with the precision at 85%
- Applied OpenCV for image transformations with masking technique (bitwise operations) to focus on important part of the image
- Compared the processed image with set of road symbol images to correctly classify the label of it

LinkedIn Clone [Reactjs, JavaScript, CSS, Firebase]

- Developed a LinkedIn clone using ReactJS and Firebase for real-time data storage
- Created a responsive user interface with features including user authentication, profile creation/editing, post creation/commenting, and real-time updates
- Utilized modern web development technologies to create a functional replica of LinkedIn

Object Distance Estimation with Computer Vision [Python, OpenCV]

- Developed a Python script for estimating the distance from a camera to an object/marker in real-time using OpenCV
- Utilized edge detection and contour analysis techniques for accurate distance estimation
- Calibrated the camera and computed the focal length for precise distance measurements
- Implemented various image processing techniques like grayscale conversion, Gaussian blurring, and Canny edge detection for preprocessing the input image and extracting meaningful features

Hotel Accreditation and Sentimental Analysis with Machine Learning [Python, NoSQL]

- Developed an application that utilized Multi-layer Perceptron, Support Vector Machine, and K-Nearest Neighbor algorithms to extract dominant aspects/labels from guest reviews stored in a NoSQL database
- Implemented GridSearchCV to optimize the parameters of the MLP algorithm, resulting in a high accuracy rate of 92%
- Conducted sentiment analysis on guest reviews using the VaderSentiment Library to gain insights into customer feedback
- Ensured improved availability and programming integrity by leveraging Google Collaboratory for development and testing purposes

Aug 2020 – Oct 2020

Dec 2019 - Mar 2020

Nov 2020 - Dec 2020

Jan 2018 – June 2019

Jan 2021 – Mar 2021

Aug 2019 – May 2021

Sep 2014 – Jun 2018